ABSTRACT

Two circular waveguides 1 and 3, each having a propagation mode in a TM01 mode, are arranged coaxially with each other while a waveguide-side choke 4 is provided between the waveguides. To a fixed-side circular waveguide 1, a rectangular waveguide 2 is connected. Thereby, the high-frequency signal fed from the rectangular waveguide 2 to the fixed-side circular waveguide 1 can be radiated from a primary radiator 5 to which a rotation-side circular waveguide 3 is connected. While the circular waveguides 1 and 3 and the waveguide-side choke 4 can constitute a rotary joint, by rotating the primary radiator 5 together with the rotation-side circular waveguide 3, scanning can be carried out with a high-frequency signal radiated from the primary radiator 5.